

**TREATY ON INTERNATIONAL COOPERATION IN THE
AREA OF PATENTS**

PCT

**INTERNATIONAL PRELIMINARY EXAMINATION REPORT
ON PATENTABILITY**

(Chapter II of the Treaty on International Cooperation in the Area of Patents)

Applicant's or Agent's File Ref. 42 078.gi.nb	FOR FURTHER ACTION		See Form PCT/IPEA/416
International Application No. PCT/EP2004/008129	International Filing Date (Month/Day/Year) July 21, 2004	Priority Date (Month/Day/Year) July 30, 2003	
International Patent Classification (IPC) or National Classification and IPC B21B29/00, B21B31/18			
Applicant SMS DEMAG AKTIENGESELLSCHAFT et al.			

1. This international preliminary examination report has been prepared by the duly commissioned International Preliminary Examining Authority according to Article 35 and is transmitted to the applicant according to Article 36.
2. This REPORT consists of a total of 4 pages, including this cover sheet.
3. This report is also accompanied by ANNEXES; these comprise
a. <input type="checkbox"/> (<i>sent to the applicant and the International Office</i>) a total of pages; these are
<input type="checkbox"/> pages of the description, claims, and/or drawings which have been amended and are the basis for this report and/or pages containing rectifications that have been approved by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions).
<input type="checkbox"/> pages that replace earlier pages but which, for the reasons given in field No. 1, item 4, and in the supplementary field, in the opinion of this Authority, contain a change that goes beyond the disclosed contents of the international application in the version originally submitted.
b. <input type="checkbox"/> (<i>sent only to the International Office</i>): (please specify the type and number of the electronic data carrier(s)), which contain a sequence listing and/or the tables that belong to it, only in computer-readable form, as specified in the supplementary field regarding the sequence listing (see Section 802 of the Administrative Instructions)
4. This report contains indications relating to the following items:
<input checked="" type="checkbox"/> Field No. I Basis of the report
<input type="checkbox"/> Field No. II Priority
<input type="checkbox"/> Field No. III Nonestablishment of opinion with respect to novelty, inventive activity, and commercial viability.
<input type="checkbox"/> Field No. IV Lack of unity of the invention.
<input checked="" type="checkbox"/> Field No. V Substantiated determination under Article 35(2) with respect to novelty, inventive activity, and commercial viability; documents and declarations in support of this determination.
<input type="checkbox"/> Field No. VI Certain documents cited
<input type="checkbox"/> Field No. VII Certain defects in the international application
<input type="checkbox"/> Field No. VIII Certain observations on the international application

Date of submission of the petition: November 18, 2004	Date of completion of this report: July 5, 2005
Name and mailing address of the office assigned to perform the preliminary examination: European Patent Office D-80298 Munich Tel: +49 89 2399-0 Tx: 523656 epmu d Fax: +49 89 2399-4465	Authorized Officer: Forciniti, M. Tel: +49 89 2399-7903

**INTERNATIONAL PRELIMINARY
EXAMINATION REPORT ON
PATENTABILITY**

International File No.: **PCT/EP2004/008129**

Field No. I Basis of the Report

1. With respect to the **language**, the report is based on the international application in the language in which it was submitted unless otherwise indicated under this item.

The report is based on a translation from the original language into the following language, which is the language of the translation, which was submitted for the following purpose:

- international search (under Rules 12.3 and 23.1 b))
- publication of the international application (under Rule 12.4).
- international preliminary examination (under Rule 55.2 and/or Rule 55.3).

2. With regard to the **constituent parts*** of the international application, the report is based on (*replacement pages which were submitted to the application office in compliance with a request according to Article 14 are considered "originally filed" in the context of this report and are not attached to the report*):

Specification, pages:

1-20 as originally filed

Claims, Nos.:

1-11 as originally filed

Drawings, Pages:

1/10-10/10 as originally filed

a sequence listing and/or any accompanying tables – see supplementary field regarding the sequence listing.

3. The amendments have resulted in the cancellation of:

- the description: pages
- the claims: Nos.
- the drawings: sheets/figures:
- the sequence listing (*exact details*):
- any tables belonging to the sequence listing (*exact details*):

4. This report has been prepared as if (some of) the amendments attached to this report and listed below had not been made, since for the reasons specified in the supplementary field they are considered by this Authority to go beyond the disclosure as originally filed (Rule 70.2 c)).
- the description: pages
 the claims: Nos.
 the drawings: sheets/figures:
 the sequence listing (*exact details*):
 any tables belonging to the sequence listing (*exact details*):

* If Item 4 applies, some or all of these pages can be furnished with the comment "replaced".

Field No. V Substantiated determination under Article 35(2) with respect to novelty, inventive activity, and commercial viability; documents and declarations in support of this determination.

1. Determination

Novelty (N)	Yes:	Claims 1-11
	No:	Claims
Inventive Activity (AI):	Yes:	Claims 1-11
	No:	Claims
Commercial Viability (CV):	Yes:	Claims 1-11
	No:	Claims

2. Documents and Declarations (Rule 70.7):

See attached page.

INTERNATIONAL PRELIMINARY
EXAMINATION REPORT ON
PATENTABILITY (ATTACHED PAGE)

International File No.: PCT/EP2004/008129

Re Item V.

1. The following document is cited in the present office action:

D1: DE 101 50 690 A (SMS DEMAG AG) April 30, 2003 (2003-04-30)

2. Document **D1** is regarded as the most closely related prior art.

This document discloses a rolling device of the general type in question.

- 2.1. The object of **Claim 1** differs from **D1** by its characterizing features and is thus novel (Article 33 (2) PCT).

- 2.2. The problem to be solved with the present invention can be seen to be the creation of a rolling mill with a small space requirement, as few parts to be changed as possible, and good guidance of the rams of the bending and balancing devices, even in the case of large roll gap heights.

- 2.3. This problem is solved in a way that is not obvious from the prior art by arranging the axial shifting devices between the rolling stand and the work roll locking mechanism and by arranging the bending devices between the work roll chocks and the backup roll chocks. The solution proposed in **Claim 1** of the present application is thus based on inventive activity (Article 33(3) PCT).

3. **Claims 2 to 11** are dependent on Claim 1 and thus also satisfy the requirements of the PCT with respect to novelty and inventive activity (Article 33 (2)(3) PCT).

4. The object of **Claims 1 to 11** is unquestionably commercially viable (Article 33 (4) PCT).